# **ANNEXURE**

# Detailed Vetting Report MSEDCL- *Post Facto* approval of FAC Charges for December 2009 submitted by MSEDCL

#### Reference:

MSEDCL's letter No. MSEDCL/CAS/FAC/L7/08of March 22,2010 for FAC submission of month December-09

#### **1.** FAC submission by MSEDCL:

1.1 Upon vetting the FAC calculations for the months of December-09, submitted vide letter under above Reference, the Commission has accorded post facto approval for the FAC amount for the month December-09 as detailed below.

The Commission issued MYT Order dated August 17, 2009 (Case 116 of 2008), approving principles of Annual Revenue Requirement (ARR) and Tariff for FY 2009-10 for MSEDCL and has also mentioned about the parameters and mechanism for computation of FAC, which have been summarized in the Appendix to this letter. The Commission has approved FAC charges for the month of December-09 in accordance with the principles stipulated in the MYT Order dated August 17, 2009 and the MERC(Terms and Conditions of Tariff) Regulations, 2005

- 1.2 The Commission has considered power purchase sources based on the MYT Order dated August 17, 2009
- 1.3. MSEDCL has forwarded FAC submissions as per formats with a charge for .December-09 at the rate of 3.6828 paise/kWH for metered sales
- 1.4 The Commission has considered the increase in power purchase cost in case of approved power purchase sources as per the MYT Order dated August 17, 2009 (Case 116 of 2008)

# 2. <u>Details of approval:</u>

The Commission has accorded post facto approval for the FAC amount of (net of T & D loss), Rs. 19.99 Crore for month December-09 The summary of the FAC claim for December-09 as submitted by MSEDCL and as approved by the Commission is shown in the Table below:-

Sr	Particulars	Unit	MSEDCL	Approved
No				by
				Commission
1	FAC incl of excess T&D	Rs. Crore	19.99	19.99
	Loss			
2	FAC rate	Paise/kWh	3.68	3.683
3	FAC rate (unmetered)			
	-LT-Ag (>1300 hours per	Rs/hp/month	4.00	4.00
	year)			
	-LT-Ag (<1300 hours per	Rs/hp/month	2.20	2.20
	year)			

In compliance with Regulation 82.6 of MERC (Terms and Conditions of Tariff) regulations 2005 the FAC allowed to be recovered amounts to Rs 19.99 Crore

Further, the carried forward under-recovered FAC for the month December-09 works out to Rs.NIL

# 3. Analysis of FAC proposal submitted by MSEDCL and computation of FAC charges is as below:

#### a) Variable Cost of Generation:

MSEDCL has submitted the break-up of purchase price of different fuels for all stations certified by Chartered Accountant.

#### i) Variable Fuel Cost:

MSEDCL has considered the base variable fuel cost for each station as approved by the Commission in the MYT Order of MSPGCL of August 17, 2009 (Case 115 of 2008) and in conformity with the directions given in the Commission's letter MERC/MON/FAC/MSEDCL/09/2637 dated November 20, 2009

MSEDCL has submitted sample bills for the fuel purchased along with the FAC submissions. MSEDCL has also submitted fuel analysis report of representative monthly sample of fuels certified by an Independent Certification Agency along with FAC submissions.

Station-wise based variable charge per unit considered for FAC based on the approved cost by the Commission is as given at the end of the report

#### ii) Secondary fuel consumption:

The Commission's clarifications on the issues of secondary fuel oil consumptions for FAC computations are as under:

In case secondary fuel oil consumption is more than 2 ml/kWh, the same should be
limited to the approved level 2 ml/kWh

In case usage of actual secondary fuel oil consumption is less than normative value of 2 ml/kWh (or no consumption), the same should be recomputed considering the normative levels.

Accordingly, the Commission has computed the cost of secondary fuel oil consumption, Such that, the normative fuel consumption allowed for FAC vetting for the month December-09 is upto a limit value of 2 ml/kWh in combination of Fuel Oil, LDO and LSHS.

The summary of fuel related costs for the month December-09 for existing generating stations of MSPGCL as approved by the Commission after detail vetting, is shown in the Table below:

Sr No	Detail	Unit	For
			December-09
1	Actual Fuel Cost	Rs Crore	705.5
2	Normative Actual Fuel cost	Rs Crore	645.8
3	Net Generation	MU	3874.9
4	Approved variable cost of generation	Rs./kWh	1.60
5	Actual average variable cost of generation	Rs./kWh	1.82
6	Average Normative variable cost of generation	Rs./kWh	1.67
7	Change in variable cost of generation $= \{(3)X[(6)-(4)]\}/10$	Rs. Crore	27.2

## iii) Auxiliary consumption:

Auxiliary consumption for all generating stations has been considered by MSEDCL at normative levels for calculation of variable cost of generation and the same is allowed.

# iv) <u>Heat Rate:</u>

MSEDCL has worked out the variable cost of generation considering normative heat rates of each station and the same is allowed.

# v) <u>Transit Loss:</u>

MSEDCL has worked out the variable cost of generation considering normative transit loss as approved in the APR Order dated June 20, 2008 for FY 2008-09, and the same is allowed.

## **b)** Variable cost of power purchase

The Commission has considered the increase in power purchase cost in case of approved power purchase sources as per the MYT order of MSEDCL of August 17, 2009 (Case 116 of 2008) as per the tabulation given at the end of the Report.

MSEDCL has submitted the data for the power purchase certified by Chartered Accountant. The details of Power Purchase by MSEDCL are given below:

S.No	Details	Unit	December-09
-1	Net Energy Purchase	MU	2,900.78
-2	Variable Cost of Energy purchased	Rs Crore	556.76
-3	Average Rate of energy purchased	Rs./kWh	1.92
-4	Approved Rate for Energy purchase	Rs./kWh	2.13

### c) <u>Unscheduled Interchange (UI) Charges:</u>

In December-09 MSEDCL has purchased /sold 206 MU through UI at avg rate of Rs. 2.73 per kWh. This is allowed

#### Scheduled Energy Received in grid through Imports from various regions and losses:

MSEDCL has claimed losses in power purchase through grid at (177.35) MU in December-09 as the difference between the Scheduled Energy (including UI) and Actual Drawal. The Commission has considered the losses in the grid as submitted by MSEDCL. For the month of December-09 the Commission has approved change in Variable (Fuel) Cost of Generation and Power Purchase Cost (C), of Rs -36.16Crore as submitted by MSEDCL.

#### d) Interest on working capital -

MSEDCL has mentioned that 10.25% is the rate of Interest for working capital. In the Note MSEDCL has mentioned that Rs. 4.85 Crores is the interest accrued on Working Capital for December 2009. However, no claim has been tabulated in FAC submission.

As per APTEL judgment, interest on the difference of normative actual cost and approved cost of fuel in a month is eligible for payment through FAC mechanism, in case such claim is made. Else it will be addressed through the Annual Trueup.

## e) Adjustment factor for over recovery / under recovery (B) -

The truing up as above is based on the performance parameters as specified in the relevant APR orders of the Commission. In case any change in the specified parameter is approved by the Commission at a later date, based on the CPRI studies pertaining to "Determination of Achievable performance parameters of the MSPGCL Thermal power stations", these values will be trued up accordingly at that time.

The summary of the adjustment factor for over recovery/under recovery for the month of December-09 as submitted by MSEDCL and as approved by the Commission is shown in the Tables below:

S.No.	Parameter	Unit	MSEDCL	Commission
1	Adjustment for over-	Rs Lakh		
	recovery/under-recovery ('B')			
1.1	Incremental cost allowed to be recovered in Month J-5(August 2009)	Rs Lakh	-635.95	-635.95
1.2	Incremental cost in Month j-5 actually recovered in j-2	Rs Lakh	0.00	0.00
1.3	Over-recovery/under-recovery (1.2-1.1)	Rs Lakh	-635.95	-635.95
2	Adjustment for over- recovery/under-recovery	Rs Lakh	6285.48	6285.48
2.1	Carried forward adjustment for over-recovery/under-recovery attributable to application of ceiling limit	Rs Lakh	-71.00	-71.00
2.2	Recovery of Rs 63.56 Cr per month in 12 instalments permitted by Commission	Rs Lakh	6356.00	6356.00
3	Adjustment factor for over- recovery/under-recovery (1.3+2.0)	Rs Lakh	5649.53	5649.53

# f. Excess Distribution loss:

MSEDCL has incurred 19.55% cumulative Distribution loss upto the month. As this is more than the approved value of 18.20%, deduction of Rs. 0.3390 Crore has been made from the computed FAC amounts of the month.

# g. Energy Sales for within License area:

The energy sales within licence area as submitted by MSEDCL for the month December-09 is 5428 MU and the same is approved by the Commission

#### 4. Summary:

The summary of the FAC amount as approved by the Commission for December-09 is shown in the Tables below:-

Total FAC amount chargeable to the consumers for the month is Rs. 19.99 Crore The amount to be carried forward for recovery at future date is zero

Sr. No.	Parameter	Unit	MSEDCL	Approved
(A)	(B)	(C)		(D)
1	Calculation of FAC (A)			
1.1	Disallowance of change in variable cost of generation corresponding to excess auxiliary consumption	Rs Lakh	-	-
1.2	Change in weighted average variable cost of generation and power purchase after accounting for disallowance of change in variable cost corresponding to excess auxiliary conumption	Rs Lakh	-	-
1.3	Apportionment of change in variable cost of generation and power purchase to License Area (C)	Rs Lakh	-3616.44	-3616.44
1.4	Working Capital Interest (I)	Rs Lakh	0.00	0.00
1.5	T & D Loss Adjustment for the year		0.00	0.00
1.6	Adjustment for Over Recovery/Under Recovery (B)	Rs Lakh	5649.53	5649.53
1.7	FAC (A) = C + I + B	Rs Lakh	2033.08	2033.08
2	Calculation of FACkWh			
2.1	Sale within License Area	MU	5428.39	5428.39
2.2	Excess T&D Loss	MU	92.05	92.05
2.3	FAC Charge (FACkWh) without considering cap on monthly FAC Charge	Paise/kWh	3.68	3.68
2.4	Cap on monthly FAC Charge	Paise/kWh	36.99	36.99
2.5	FAC Charge (FACkWh) considering cap on monthly FAC Charge	Rs/kWh	0.04	0.04
3	FAC (A)			
3.1	FAC (A) considering cap on Monthly FAC Charge	Rs Lakh	1999.18	1999.18
3.2	FAC (A) disallowed corresponding to excess T&D loss	Rs Lakh	33.90	33.90
3.3	Carried forward FAC (A) for recovery during future period	Rs Lakh	0.00	0.00